FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-8095

Country Morning Farms – Milk & Juice Processor

SUMMARY

Country Morning Farms is completing the construction of a milk/juice processing facility in Warden (Grant Co.) and expects to begin processing in the Fall of 2004. Raw milk and juice concentrate will be trucked to the facility for processing and bottling. The facility will operate 5 days/week, year around. All process wastewater will be sent to the city's industrial wastewater treatment facility, which consists of a series of facultative lagoons and sprayfield irrigation.

A clean-in-place system that cleans, sanitizes, and rinses the equipment will produce the bulk of the process wastewater on a daily basis. The permit will limit the discharge to a maximum daily flow of 17,000 gpd and an average monthly max. of 10,000 gpd. An engineering analysis of the proposed discharge on the city's industrial system showed BOD and TSS loads to be approximately 1%, and the TKN load to be less than 1% of the design capacity of the treatment facility.

In addition to requiring the routine monitoring and testing of the wastewater, the permit will require the submittal of an O&M manual that describes the wastewater treatment and collection system, a spill plan, and a slug control plan to prevent slug loads to the city's treatment system.

Don Nichols

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-8095. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the city of Warden's Industrial Wastewater Treatment facility. This Fact Sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This Fact Sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The Fact Sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The Fact Sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

GENERAL INFORMATION	
Applicant	Country Morning Farms
Facility Name and Address	225 N. County Road Warden, WA 98857
Type of Facility:	Milk & Juice processing and bottling
Facility Discharge Location	At the northern boundary of the City of Warden, next to Road U S.E. Latitude: 46° 58' 25" N Longitude: 119° 02' 48" W.
Treatment Plant Receiving Discharge	City of Warden's industrial wastewater treatment facility
Contact at Facility	Name: Gerald Gilbert Telephone #: 509.488.3966
Responsible Official	Name: Gerald Gilbert Address: P.O. Box L, Othello, WA 99344 FAX #: 509.488.1121

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

HISTORY

Country Morning Farms began construction of its milk & juice processing/bottling facility at the city of Warden in the Spring of 2004. It had previously operated a facility at another location in the area that produced approx 70,000 gallons per week of milk product. The new facility was designed to allow for increased production and more efficient handling of the milk. It is planned for the new facility to become operational in the Fall of 2004.

INDUSTRIAL PROCESSES

Information presented in the permit application shows that approximately 100,000 lbs/day of whole milk will be processed and bottled to produce 11,000 gpd of product. In addition to milk, juice mixes (2000 gpd) will be processed into bottled juice and beverage products (5000 gpd). The facility will operate 12hrs/day, 5 days/week, year around.

Milk process:

According to information for another milk processor, raw milk will be off-loaded from tank trucks into storage silos. The milk is then sent to the separators where the cream is removed. The cream is sent to its own storage tank, and the "skimmed" milk is sent to the homogenizer and pasteurizer. Pasteurized milk is then bottled and sent to refrigeration.

Juice process: Juice concentrate is trucked to the facility and stored on-site. Water is added to the concentrate in a blend ratio that is prescribed by the client.

A clean-in-place (CIP) system will be used for cleaning, sanitation, and rinsing of the process lines, the floors, and onsite storage tanks. In addition, the CIP system will be used to clean truck tanks that bring the raw milk and juice concentrate to the facility. The CIP system will produce the bulk of the process wastewater from the facility. Cleaning generally includes the use of a chlorinated compound, and the rinse process is generally a two step process that includes the use of a dilute acid and caustic.

The permit application shows a maximum daily discharge flow of 17,000 gpd and a maximum average monthly flow of 10,000 gpd.

TREATMENT PROCESSES

Information presented in the permit application shows that process wastewater will be collected in a floor drain system which will discharge into a 600 gallon stainless steel below ground sump tank (Fig. 1). The wastewater will be pumped from the sump tank to a 7000 gallon above ground holding tank. Two pumps will be provided at the sump tank to insure backup capability in case of equipment failure or maintenance needs. The above ground tank will be equipped with a mechanical agitator to keep the contents mixed. A manually operated valve will discharge the wastewater to the city's industrial wastewater collection system.

An injection port will be installed in the line connecting the sump and holding tank that will allow chemical addition for pH control. A calibrated sight tube on the above ground holding tank

will be used to determination of daily discharge volume instead of using a flow meter. The above ground tank will also be equipped with a sampling port for testing.

The City of Warden's industrial wastewater system was designed to manage and treat the process wastewater from two potato processors that operate year around; Ochoa Ag Unlimited Foods, LLC (f/n/a Basin Frozen Foods) and Washington Potato. The current treatment system is a series of lagoons that was upgraded in 2000 and was designed to provide settling, mineralization of organics, and volatilization and nitrification of nitrogen as the water passed through the system. Final treatment is via spray irrigation. The facility is currently permitted; SWDP #5379.

PERMIT STATUS

This is a new facility. An application for a permit was submitted to the Department on June 7, 2004 and accepted by the Department on June 18, 2004.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and engineering report. The proposed wastewater discharge is characterized for the following parameters. The following average values were reported in the application and are from four samples taken from their other milk facility.

Parameter	Concentration
BOD_5	1500 mg/L
TSS	540 mg/L
TKN	29.3 mg/L (single sample)
Nitrate	6.7 mg/L (single sample)

The values provided by the Permittee are similar to average values from a milk processing facility in Spokane County.

Parameter	Concentration
BOD_5	2000 mg/L
TSS	900 mg/L

SEPA COMPLIANCE

The Port of Warden (Grant Co.) was the lead agency on the construction of the new facility. Comments on the checklist were due June 6, 2002.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known,

available, and reasonable treatment (AKART) and not interfere with the operation of the POTW (Publicly Owned Treatment Works). For the purposes of this portion of the Fact Sheet, POTW shall mean the city's industrial wastewater treatment facility.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the engineering report: Additional Discharge of Country Morning Farms to the City of Warden Industrial Wastewater Treatment Facility, Irrigation and Hydraulics Unlimited, 2002.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). Existing federal categorical limitations for this facility are found under 40 CFR Part 405 (Dairy Products). The Fluid Products Subcategory (405.26) does not list any discharge limitations for new dischargers. Instead, all new sources must comply with the general pretreatment regulations; 40 CFR Part 403.

The facility also produces bottled juice and beverage products from juice mixes and concentrates. In the "Canned and Preserved Fruits and Vegetables Processing Point Source Category" (40 CFR, Part 407), there are no discharge limits for general bottled juices.

The engineering report (Irrigation & Hydraulics Unlimited, 2002) evaluated the proposed discharge to the city's industrial system. This evaluation was based on the following wastewater characteristics for the milk facility. These are average values from two composite samples collected from Country Morning Farm's other milk processing facility.

Average monthly flow:	20,000 gpd
BOD:	1500 mg/L; 250 lbs/day
TSS:	540 mg/L; 90 lbs/day
TKN:	29.3 mg/L; 4.9 lbs/day
Nitrate:	6.7 mg/L

The estimated BOD and TSS load values are approximately 1% of the design capacity of the industrial facility; the TKN load is less than 1%. Based on nitrogen being the limiting factor for the city's treatment facility, the engineering report concluded that, "Country Morning Farms does not affect the nitrogen situation."

The engineering report did not contain an analysis or description of the added dissolved solids (salt) load from the milk processing facility to the treatment facility. The chemicals used in the CIP system (caustic, acid) could potentially add a significant salt load to the system. This is important because the lagoon system provides minimial, if any, treatment of dissolved salts, and additional salt loading to the sprayfields could be detrimental to the soils and crops.

The permit will require sampling and testing for "fixed dissolved solids" to determine the salt load from the process.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

Pollutant concentrations and discharge volumes in the proposed discharge with technology-based controls in place will not cause problems at the receiving POTW such as interference, pass-through or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

EFFLUENT LIMITATIONS

	Proposed Limits
Max. average monthly flow	10,000 gpd
Max daily flow	17,000 gpd

The proposed flow limits are based on the values given in the permit application. They are different (lower) from the design flow values used in the engineering report.

It was decided not to include BOD, TSS, and TKN load limits into this permit because there is no firm database from which to determine the limits. Additionally, the estimated loads appear to be less than 1% of the design loads for the city's industrial system. The Permittee will be required to monitor for BOD and TKN in the process wastewater, and load limits may be included in the next permit.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

This is a new processing facility and there is O&M information on the treatment system. The proposed permit requires submission of an O&M manual for the entire wastewater system.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC). Compliance with the prohibited discharges is required by the federal pretreatment discharge limits in 40 CFR Part 405.26. The prohibited dischargers are listed in Section S5 of the permit.

The prohibited discharges that apply most to the Country Morning Farms wastewater include:

- Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the treatment facility.
- Pollutants which will cause corrosive structural damage to the treatment system, but in no case discharges with pH lower than 5.0 or greater than 11.0, unless the works is specifically designed to accommodate such discharges.
- Heat in amounts which will inhibit biological activity in the treatment facility resulting in interference, but in no case heat in such quantities that the temperature at the City's treatment plant exceeds 40°C (104°F) unless the approval authority, upon request of the City, approves alternative temperature limits.

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

Information presented in the permit application and engineering report does not indicate the generation of any process solid wastes. There appears to be a potential to generate solid wastes from the bottling operation.

This permit cycle will not require the submittal of a solid waste plan. If it is discovered that process solid wastes are being generated and poses a threat to the environment or the public health, Ecology can modify the permit and require a plan.

SPILL PLAN

Except for the chemicals that are used with the CIP system, especially acids and caustics, and the use of lubricating oils and greases, the Department is unaware that the Permittee stores chemicals that have the potential to cause water pollution or impact to the POTW if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The CIP chemicals are meant to sanitize the equipment, which means that a spill of these chemicals could adversely affect the microorganism population at the treatment facility. This could cause an upset of the treatment system and a reduction in the level of treatment.

The permit will require the submittal of a spill plan. The plan shall include the following information:

1. A description of the actions which facility personnel must take in the event of a spill of CIP chemicals or any other chemical that could cause harm to the wastewater collection and treatment system.

2. A current list of names and phone numbers (office and home) of all persons to be contacted in case of a spill and who is qualified to act as an emergency coordinator. Where more than person is listed, one must be named as the primary coordinator, and others listed in the order in which they will assume responsibility as alternates.

3. A list of all emergency equipment at the facility (e.g., fire extinguishers, spill control equipment; alarm systems) where this equipment is required. The list must be kept up to date. The location and physical description of each item must be given along with a brief outline of its capabilities.

4. A description of the spill prevention measures that will prevent, contain, or inhibit the flow of a spill into the wastewater system (containment structures; protective barriers; storage tank construction).

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge that could adversely effect the POTW therefore a slug discharge control plan is required (40 CFR 403.8 (f)(2)(v)). This determination is based on: the hand operated discharge valve that controls the discharge from the 7000 gallon above ground storage tank to the city's collection system, the use of tanker trucks that transports the raw milk to the facility and may arrive with "bad" or unacceptable loads, and the use of milk silos to store raw milk and where raw milk can "go bad".

The slug control plan shall contain the following information:

1. A description of discharge practices, including any non-routine discharges: who is responsible for the opening and closing of the 7000 gallon tank discharge valve; what discharge rate is used; what are the maximum and minimum discharge rates; when is the valve opened and closed; who is responsible for recording the daily discharge volume; will batch (slug) discharges occur.

2. A description of stored chemicals. These include lubrication and sanitation chemicals.

3. A procedure for notifying the city of Warden of slug discharges, including any discharge that would violate the "prohibited discharges" in the permit, with procedures for the submittal of a written report within five (5) days of the discharge.

4. If necessary, procedures to prevent adverse impacts from accidental spills, including the inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations of transport tanks, worker training, building of containment structures or equipment, and measures and equipment for emergency response.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for approximately two years.

The reason that this permit will not be issued for the standard five year period is because of Ecology's initiative to issue and manage permits by watershed. This permit is in Ecology's Mid-Columbia watershed where all permits will be reissued in FY 2006 (July 1, 2005 – June 30, 2006). Issuing this permit with a June 30, 2006 expiration date will put it into the proper watershed sequence.

REFERENCES FOR TEXT AND APPENDICES

Irrigation & Hydraulics Unlimited, 2002. Additional Discharge of Country Morning Farms to the City of Warden Industrial Wastewater Treatment Facility. August.

Washington State Department of Ecology.

Laws and Regulations(http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information
(http://www.ecy.wa.gov/programs/wq/wastewater/index.html

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on June 21 and June 28, 2004 in the Columbia Basin Herald to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Fact Sheet and permit were written by Don Nichols.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Significant Industrial User (SIU)--

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C—TECHNICAL CALCULATIONS

APPENDIX D—RESPONSE TO COMMENTS

None were received from the Permittee or the city.

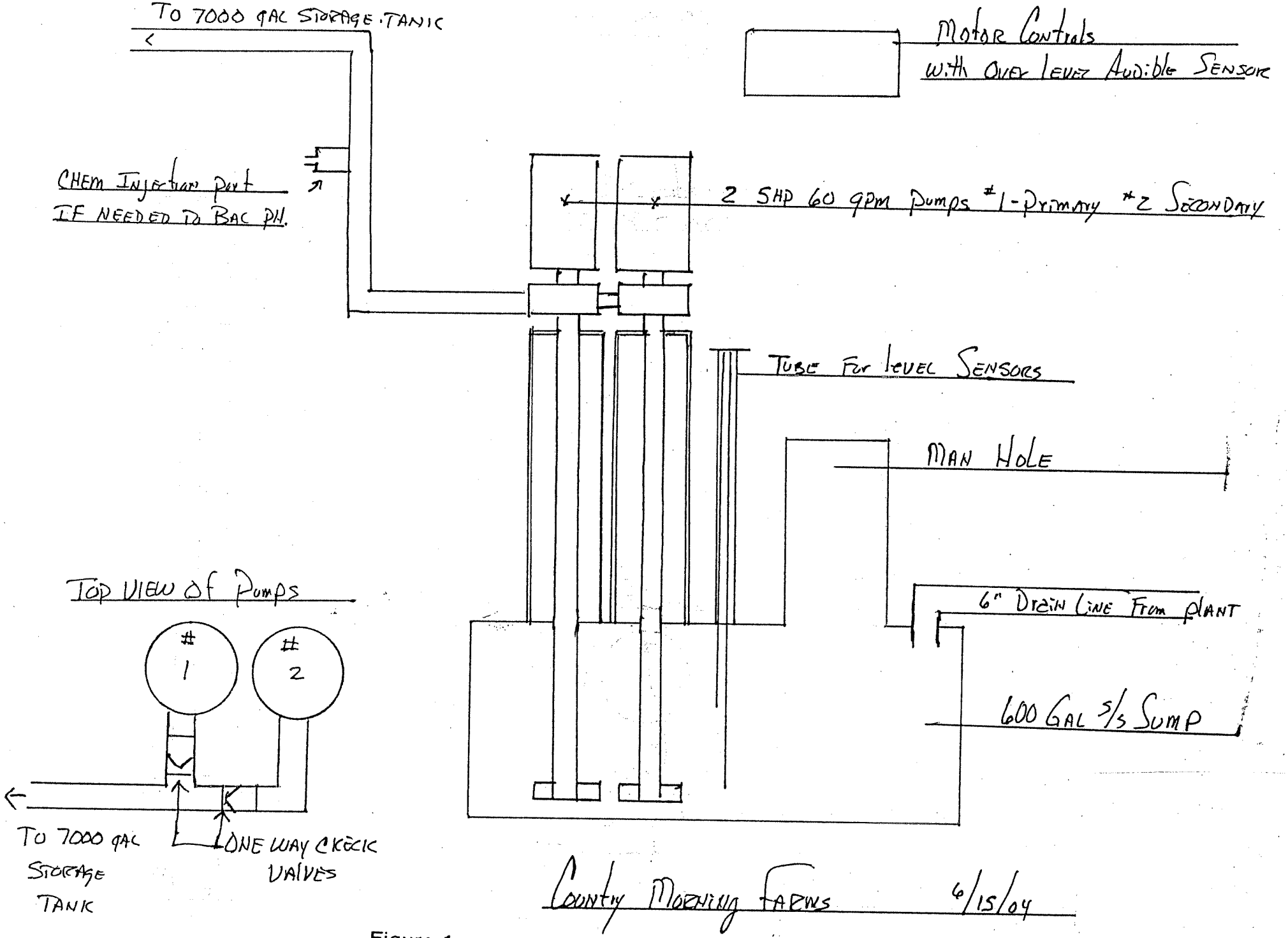
TO 7000 GAL STORAGE TANK
Motor Controls
With Over Level Audible Sensor
CHEM Injection Port
IF NEEDED TO BAC PH.
2 5HP 60 gpm Pumps #1-Primary #2 Secondary
Tube For level Sensors
MAN HOLE
6" Drain Line From plant
600 GAL S/S Sump
Top View of Pumps
#1
#2
TO 7000 GAL STORAGE TANK
ONE WAY CHECK VALVES
County Morning Farms
6/15/04

Figure 1

Country Morning Farms 6/15/04

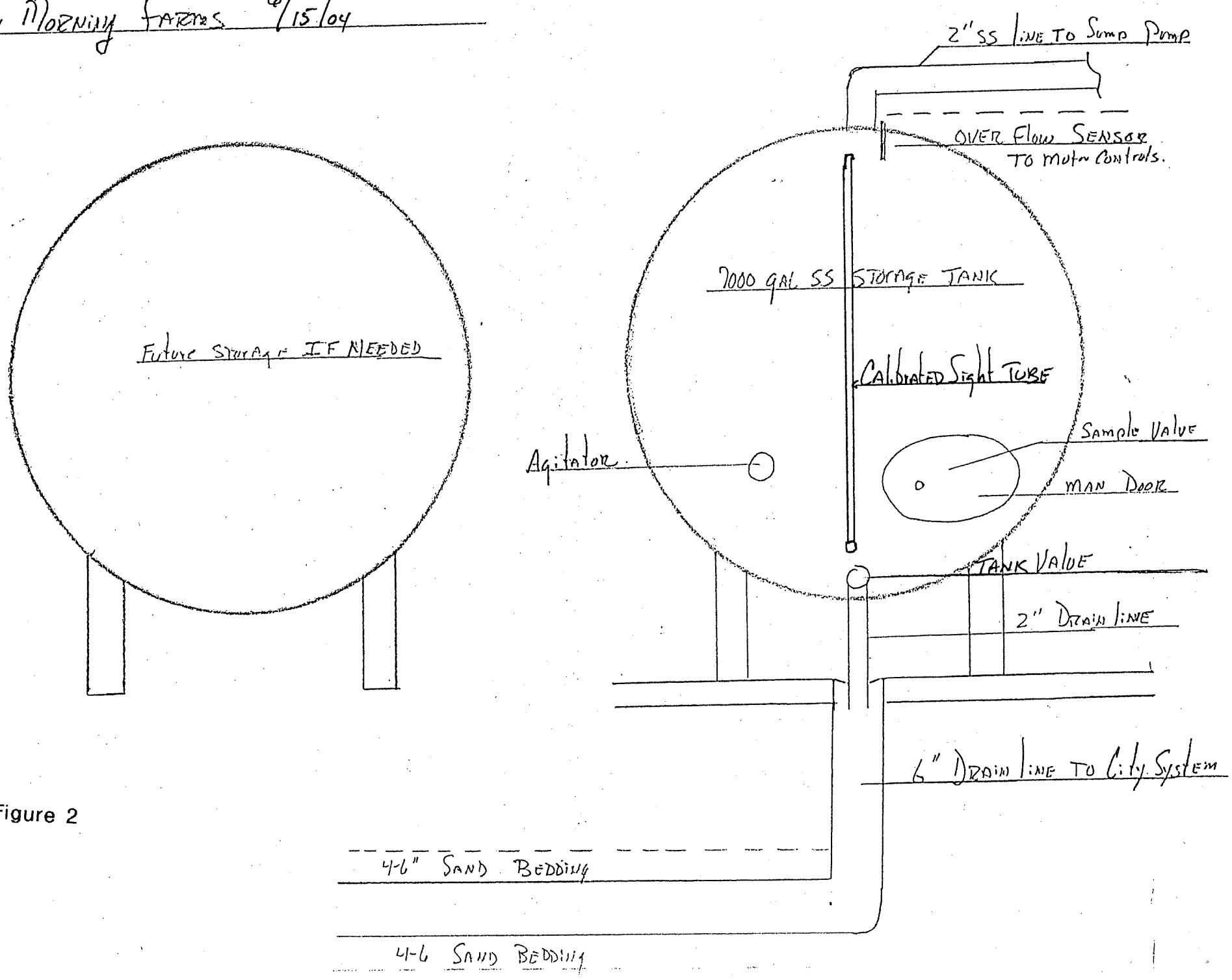

Figure 2

ADDENDUM #1

Country Morning Farms – Approximate Permit Actions Timeline

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2004											Issue permit	
2005											Slug Control Plan O&M Manual Spill Plan	
2006	Permit Application											